

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER No. 78-65

WASTE DISCHARGE REQUIREMENTS FOR:

HALF MOON BAY LANDFILL,
COUNTY OF SAN MATEO
CLOSURE OF CLASS II DISPOSAL SITE
SAN MATEO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board), finds that:

1. The County of San Mateo, hereinafter called the discharger, owns a Class II solid waste disposal site at Half Moon Bay which was formerly operated by a private operator. The site was used for the disposal of inert material and limited group 2 wastes (wood and backyard clippings). Disposal operations were halted on December 31, 1976.
2. The landfill is located about one mile southwest of the intersection of State Highway 92 and State Highway 1 as shown in attachment A, which is incorporated herein and made part of this Order.
3. The county submitted a site closure plan on January 23, 1978, an addendum on March 3, 1978, and May 10, 1978, which are consistent with all provisions of the Regional Board Resolution No. 77-7.
4. Groundwater near the site is used for agricultural purposes and the beneficial uses of the Pacific Ocean are:
 - Recreation
 - Esthetic enjoyment
 - Navigation
 - Fish habitat
5. Land within 1000 feet of the site is used for industrial and residential purposes and is traversed by a highway.
6. The Board adopted a Water Quality Control Plan for the San Francisco Bay Basin in April 1975 and this Order implements the Water Quality Objectives stated in that Plan.
7. This Board has notified the dischargers and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

8. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.
9. This project involves the closure of a county owned Class II-2 facility with minor alterations to the land. Consequently, this project will not have a significant effect on the environment based upon the exemption provided in Section 15101, Title 14, California Administrative Code.

IT IS HEREBY ORDERED that San Mateo County and any other person who owns this site, shall comply with the following.

A. Site Closure Specifications

1. The solid waste disposal site shall be closed in accordance with the closure plan cited in Finding 3 of this Order. This plan includes specifications for final cover, compaction, grading, construction of surface drainage ditches, and methane gas control.
2. No group 1 or additional group 2 wastes shall be stored or deposited on this site.

B. Leachate and Drainage Specifications

1. Leachate or polluted water from this site shall not be discharged to waters of the State.
2. All necessary facilities shall be provided to protect useable groundwaters from degradation as a result of leachate discharge or carbon dioxide migration.
3. The completed disposal area shall be protected from any washout or erosion which could occur as a result of a flood having a predicted frequency of once in 100 years. The perimeter drainage ditches and all other facilities shall be designed to convey maximum anticipated storm runoff and to withstand differential settlement.
4. The migration of methane gas from the disposal site shall be controlled as necessary to prevent the creation of any nuisance.
5. Any waste materials which have slipped or threatened to leave the disposal site shall be removed and relocated at a suitable site upon authorization of the Executive Officer.

C. Provisions

1. The discharger shall comply with all portions of this Order immediately upon adoption of this Order.

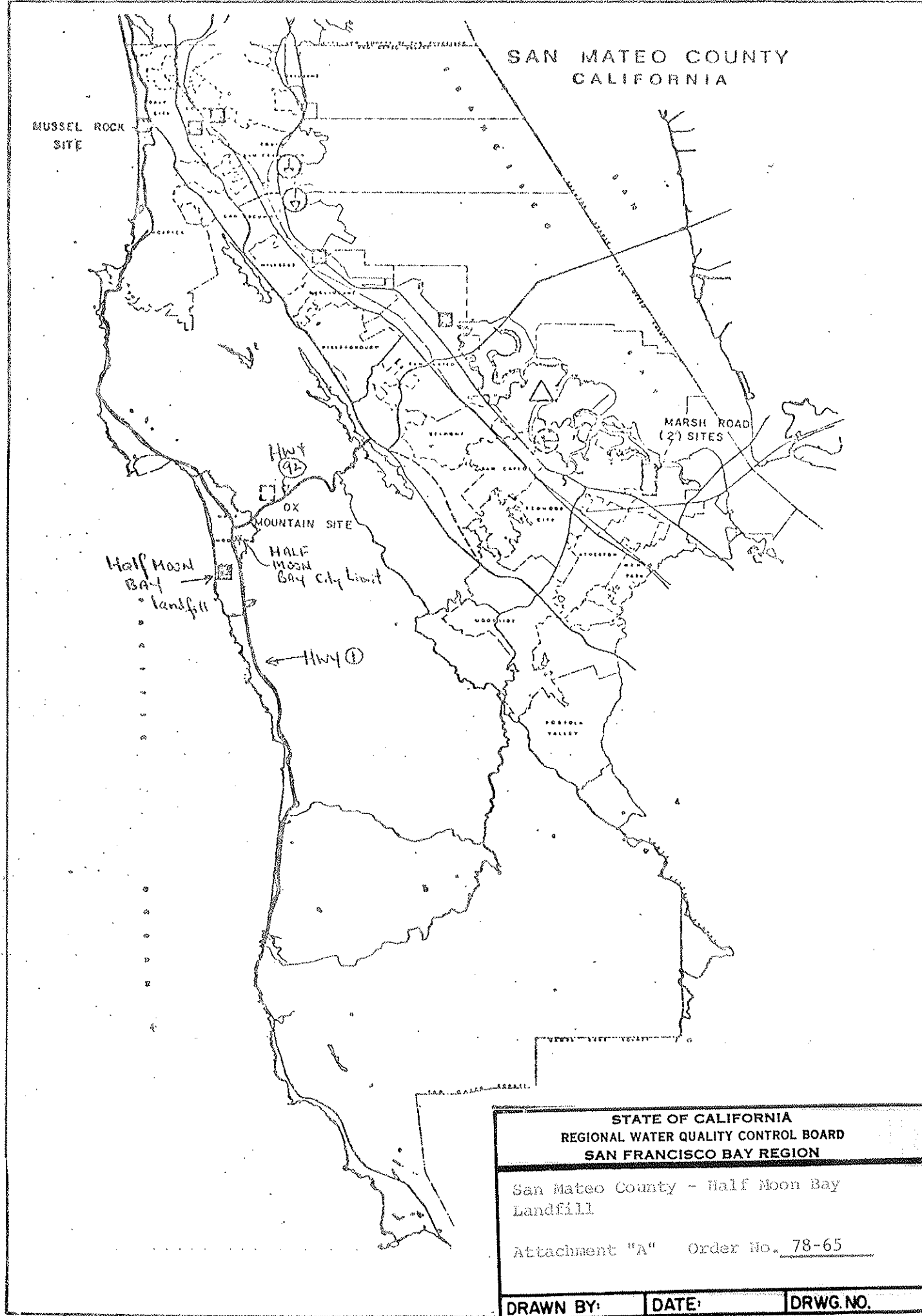
2. This Board considers the current property owners or any new owner to have a continuing responsibility for correcting any problems associated with this solid waste disposal site during subsequent use of the land for other purposes.
3. The discharger shall notify this Board in writing of any proposed change in ownership of this site. The current owners shall notify and provide a copy of this Order to any subsequent owner of this property or portion thereof prior to sale.
4. The discharger shall file with the Board any monitoring program which may be directed by the Executive Officer.
5. Order No. 75-65 is hereby rescinded.
6. The discharger shall permit the Regional Board:
 - a. Entry upon premises on which waste are located or in which any required records are kept,
 - b. Access to copy any records required to be kept under terms and conditions of this Order,
 - c. Inspection of monitoring equipment or records, and
 - d. Sampling of any discharge.

I, Fred H. Dierker, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on **August 15, 1978.**

FRED H. DIERKER
Executive Officer

Attachments:

Map A
Resolution No. 77-7
Self-Monitoring Program



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

RESOLUTION NO. 77-7

MINIMUM CRITERIA FOR PROPER CLOSURE OF
CLASS II SOLID WASTE DISPOSAL SITES

- I. WHEREAS, experience has shown that Class II solid waste disposal sites can be sources of serious water pollution problems even after their use has been terminated, unless properly closed, and
- II. WHEREAS, these problems may include: odors, discharge of leachate, exposed refuse due to inadequate cover, and ponding of refuse-polluted water on the site, and
- III. WHEREAS, Section 2535 of the California Administrative Code provides as follows:

Completion of Disposal Operations. (a) Prior to cessation of disposal operations at a waste disposal site, the operator shall submit a technical report to the appropriate regional board describing the methods and controls to be used to assure protection of the quality of surface and groundwaters of the area during final operations and with any proposed subsequent use of the land. This report shall be prepared by or under the supervision of a registered engineer or a certified engineering geologist.

(b) The methods used to close a site and assure continuous protection of the quality of surface and groundwater shall comply with waste discharge requirements established by the regional board.

(c) The owner of the waste disposal site shall have a continuing responsibility to assure protection of useable waters from the waste discharge, and from gases and leachate that are caused by infiltration of precipitation or drainage waters into the waste disposal areas or by infiltration of water applied to the waste disposal areas during subsequent use of the property for other purposes, and

- IV. WHEREAS, the establishment of minimum criteria for proper closure of Class II solid waste disposal sites is desirable to protect the quality of waters of the State and to alert site owners and operators as to their specific responsibilities, and

- V. WHEREAS, pursuant to Section 15104 of the California Environmental Quality Act Guidelines, this Resolution applies to minor alterations to land which do not have significant adverse effects on the environment and is therefore exempt from the provisions of the Act.
- VI. THEREFORE BE IT RESOLVED that this Regional Board establishes the following minimum criteria for proper closure and subsequent maintenance of Class II solid waste disposal site:
1. All completed disposal areas shall be compacted and provided with a final cover of at least three feet of clean soil. A lesser thickness of final cover may be allowed upon a demonstration that, due to thorough compaction of refuse or other factors, differential settlement is likely to be minimal. At least one foot of the final cover shall be compacted to attain a permeability no greater than 10^{-6} cm/sec. Exceptions to this requirement may be granted upon a demonstration that equivalent protection against water penetration may be provided by other means.
 2. Completed disposal areas shall be graded and maintained to prevent ponding and to provide slopes of at least three percent. Lesser slopes may be allowed if a sewer system or other equivalent means of carrying off surface drainage is provided. Steep areas, surface drainage courses, or other areas subject to erosion shall be provided with a lining, or planted with vegetation, or otherwise designed to prevent such erosion.
 3. Slopes shall be designed to minimize the potential for sliding by control of grades, drainage, or other means. Any slides observed within the disposal area shall be promptly stabilized, and the Executive Officer shall be notified immediately upon discovery of a slide.
 4. All necessary facilities shall be provided to ensure that leachate from group 2 waste and ponded water containing leachate or in contact with refuse is not discharged to surface waters of the State.
 5. The disposal area(s) shall be protected from any washout or erosion and from inundation, which could occur as a result of tides or of floods having a predicted frequency of once in 100 years.
 6. All necessary facilities shall be provided to protect usable groundwaters from degradation as a result of leachate discharges or carbon dioxide migration.
 7. The migration of methane gas from group 2 waste shall be controlled as necessary to prevent creation of a nuisance.

VII. BE IT FURTHER RESOLVED that this Board's Executive Officer will request that closure plans be submitted by operators of all Class II sites at the earliest practicable date. Closure plans will be approved by this Board by inclusion in waste discharge requirements. The Board will amend closure plans as necessary to provide for conformance with the above minimum criteria. Site closure plans shall include the following:

- a. The boundaries of areas used for waste disposal.
- b. Method of control of surface drainage flow from the site.
- c. Evaluation of the anticipated settlement due to decomposition and consolidation of the wastes.
- d. Thickness of cover and physical properties including permeability, expansion characteristics and erodibility.
- e. Relationship of waste disposal area to underlying groundwater quality.
- f. Location of groundwater monitoring points.
- g. Method for control of methane.
- h. Proposed subsequent use of the land.

VIII. BE IT FURTHER RESOLVED that this Board will normally require implementation of the site closure plan as rapidly as possible after completion of group 2 waste disposal operations at a site or portion thereof. The Board may authorize delays of specified duration in meeting final slope requirements pending determination of subsequent land use, provided interim measures are taken to protect water quality.

IX. BE IT FURTHER RESOLVED that it is the intention of this Board to take all measures practicable to ensure that subsequent owners of sites are made aware of site closure requirements.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on July 19, 1977.

FRED H. DIERKER
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

Half Moon Bay Landfill

San Mateo County

ORDER NO. 78-65

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

HALF MOON BAY LANDFILL
SAN MATEO COUNTY

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Section 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principal purposes of a monitoring program by a waste discharger, also referred to as a self-monitoring program, are: (1) to document compliance with waste discharge requirements and prohibitions established by this Regional Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the latest edition of Standard Methods for the Examination of Water and Wastewater prepared and published jointly by the American Public Health Association, American Water Works Association, and Water Pollution Control Federation, or other methods approved and specified by the Executive Officer of this Regional Board, including the methods specified in attached APPENDIX E.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health or a laboratory approved by the Executive Officer. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. STANDARD OBSERVATION

Once each month the completed disposal areas shall be inspected for the following observations: a) evidence of daylighted refuse and erosion b) evidence of slope failure, and c) evidence of leachate leaving the disposal area.

D. REPORTING FREQUENCY

The standard observation inspection must be implemented according to the above described frequency (monthly) and reported quarterly. The ground-water wells must be monitored according to the above described frequency and reported semi-annually.

E. SEEPAGE AND/OR LEACHATE MONITORING

<u>Station</u>	<u>Description</u>
L-1 thru L-'n'	At each point at which discharge occurs from the disposal area. Include a map indicating locations of discharge(s).

<u>Station</u>	<u>Type of Sample and Frequency</u>	<u>Analyses</u>	<u>Units</u>
All L Stations	Grab sample at each occurrence daily.	COD D.O. Dissolved Sulfide Odors Color pH Conductivity	mg/l mg/l mg/l description description electrometric units micromhos/cm

A report shall be made by telephone of any seepage or leachate leaving the disposal area immediately after occurrence. A written report shall be filed with this Board within five working days and shall contain the following information: (1) Map showing location(s) of discharge (2) Approximate flow rate (3) Nature of effect (i.e. discoloration of receiving water, size of affected area and color) and (4) Corrective measures undertaken.

I, Fred H. Dierker, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in the Regional Board **Order No. 78-65**.
2. Has been ordered in writing by the Executive Officer on February 4, 1976, and became effective immediately, and was revised to be implemented on the date ordered as shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from either the Executive Officer or the discharger, and will be revised upon written agreement of the Executive Officer and the discharger.

FRED H. DIERKER
Executive Officer

Date Ordered _____